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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,457	11/28/2003	Gon Kim	0465-1093P	9994
2292	7590	01/04/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				PERRIN, JOSEPH L
ART UNIT		PAPER NUMBER		
		1746		
SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE		
3 MONTHS	01/04/2007	ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/04/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/722,457	KIM ET AL.	
	Examiner Joseph L. Perrin, Ph.D.	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Information Disclosure Statement

1. It is noted that an Information Disclosure Statement under 37 CFR 1.97 for the present application has not been received by the Office. If Applicant believes this to be in error, Applicant is urged to submit documentation supporting a proper filing of any previously submitted information disclosure statements in order to have such disclosures considered by the Office.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the abstract contains the legal phraseology "means". Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 1 is objected to because of the following informalities: In claim 1, reference numeral “200” should either be removed or all claimed structures should be represented with reference numerals in parentheses. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4-11 are indefinite because it is unclear how a single “member” can be structurally installed as separate structural components as claimed. Similarly, in claim 11, “a connecting member” is used to describe separate structural members at the upper front and rear sides. As best understood from the original disclosure (for instance the Figures and relative associated text), the “elastic member” connected to “a connecting member” includes two separate structural components (i.e. two springs and two connectors) and the claims will be examined accordingly. However, clarification and correction are still required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 3,703,091 to STEELE. Re claims 1-, STEELE discloses a washing machine having a cabinet (301; conventionally known to have 6 sides), a tub (12) capable of opening from the front, a rear motor assembly (17/19/20/21) rotatably mounted to an inner tub drum (13), and vibration attenuating means comprising right and left dampers (302/303) below the tub and front and rear springs (340) installed on the tub via connecting members at front and rear sides over the tub and at a middle portion between right and left sides over the tub connected to the top cabinet plate via connectors (141/142) (see Figure 11 and relative associated text). Although the position is taken that STEELE reads on the claimed washing machine having a “motor in rear of the tub” to drive the horizontal drum shaft, even if *arguendo* one were to construe such language as only reading on a motor directly mounted to the rear of the tub and directly connected to the rotatable horizontal drum shaft, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to use any of the common knowledge horizontal rotary drum motors in the washing machine art, such as that in SONODA and other cited prior art references, since applicant has not disclosed that using one

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structural equivalent washing machine motor over another solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other horizontal washing machine motors and the selection of any of these known equivalents to provide rotary drive to a washing machine drum would be within the level and knowledge of ordinary skill in the art.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 4-6 & 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,826,932 to SONODA *et al.* (hereinafter “SONODA”). Re claims 1, 4-7 & 11, SONODA discloses a washing machine having a cabinet (conventionally known to have 6 sides), a tub (18) capable of opening from the front (col. 3, lines 45-46), a rear motor (50) rotatably mounted to an inner tub drum (20), and vibration attenuating means comprising damper (14) and front and rear springs (16) installed on the tub via connecting members at front and rear sides over the tub and at a middle portion between right and left sides over the tub connected to the front and rear cabinet plates (see mounting on top peak of tub in Figure 1).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over SONODA in view of U.S. Patent No. 3,703,091 to STEELE. Recitation of SONODA is

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repeated here from above. While SONODA discloses a damper unit (14) in the middle portion between the front and rear sides of the tub, SONODA does not clearly show plural damper units also installed at the right and left sides under the tub. STEELE teaches that it is known to provide a damper system (302/303) in said middle portion and between the right and left sides under the tub to maintain "a stable equilibrium condition" (see Figure 11 and relative associated text). Therefore, the position is taken that it would have been within the level and skill of one having ordinary skill in the art at the time the invention was made to provide the washing machine of SONODA with the damper system of STEELE for the purpose of providing an additional damper to enhance the equilibrium condition (i.e. minimize vibration) in a washing machine. Moreover, there would be a reasonable expectation of success of increasing the number of dampers and spreading out the location of the dampers (i.e. right and left sides) in order to more effectively control equilibrium/vibrations, such being readily evident to one having ordinary skill in the art.

14. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over SONODA in view of STELWAGEN or STEELE. Recitation of SONODA is repeated here from above. While SONODA discloses attaching the springs at the top of the front and rear plates of the cabinet proximate to the top plate, SONODA does not expressly disclose connection of the springs to the top plate. STELWAGEN & STEELE teach that it is known to provide a washing machine with springs connected to the cabinet at the top plate proximate the front and rear plates for controlling vibration (see Figure 1 and

relative associated text of STELWAGEN & Figure 2 and relative associated text of STEELE). Thus, in the aggregate, SONODA and either STELWAGEN or STEELE disclose connecting front and rear springs of a washing machine tub at the front and rear portions of the top plate or the upper portions of the front and rear plate of the cabinet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the location of the spring connection to the cabinet in any combination of these known configurations (i.e. lower front top plate & lower rear top plate (claim 7); lower front top plate & upper rear plate (claim 8); and upper front plate & top rear plate (claim 9)), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Moreover, there would have been a reasonable expectation of success in arranging the springs in any of the aforementioned configurations/combinations to attenuate front/rear vibrations of the tub.

15. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over STEELE in view of SONODA. Recitation of STEELE is repeated here from above. While STEELE discloses attaching the springs at the top plate of the cabinet proximate the front and rear plate, STEELE does not expressly disclose connection of the springs to the front and rear plates. SONODA teaches that it is known to provide a washing machine with springs at the top of the front and rear plates of the cabinet proximate to the top plate (see Figure 1 and relative associated text of SONODA). Thus, in the aggregate, SONODA and STEELE disclose connecting front and rear springs of a

washing machine tub at the front and rear portions of the top plate or the upper portions of the front and rear plate of the cabinet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the location of the spring connection to the cabinet in any combination of these known configurations (i.e. lower front top plate & upper rear plate (claim 8); upper front plate & top rear plate (claim 9); and upper front plate & upper rear plate (claim 10)), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Moreover, there would have been a reasonable expectation of success in arranging the springs in any of the aforementioned configurations/combinations to attenuate front/rear vibrations of the tub.

Conclusion

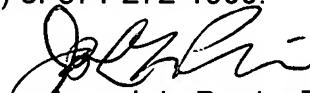
16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,974,000 to CARLSON et al., U.S. Patent No. 6,782,722 to YOKOI et al., U.S. Patent No. 6,574,997 to MAYER et al., U.S. Patent No. 6,151,930 to CARLSON, U.S. Patent No. 5,907,880 to DURAZZANI et al., U.S. Patent No. 5,870,907 to CHO, U.S. Patent No. 5,335,522 to STADELmann et al., U.S. Patent No. 5,230,229 to STADELmann et al., U.S. Patent No. 5,207,081 to FUSE, U.S. Patent No. 5,080,204 to BAUER et al., U.S. Patent No. 3,580,014 to MAZZA, EP 487311 to FUSE, JP 05-131075 to MATSUDA et al., JP 05-084387 to SUMIYA et al., & JP 04-312498 to MATSUDA, which each disclose washing machines with lower dampers and upper springs for vibration attenuation.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1746

JLP